The Industrial Labour Welfare Association Ltd.,
COIMBATORE.

Address of welcome by

* **Mr. G. D. NAIDU,**
  President, Industrial Labour Welfare Assn. Ltd.,

and

Replies by

* **Dr. HARRY F. CLEMENTS,**
  Professor of Plant Physiology, University of Hawaii, Honolulu

and

* **Sri GIRDHARILAL,**
  Research Officer, Daurala Sugar Works, Daurala, Meerut, UP.

on

26-8-'58.

at

"Gopal Bagh",

Avanashi Road, Coimbatore.

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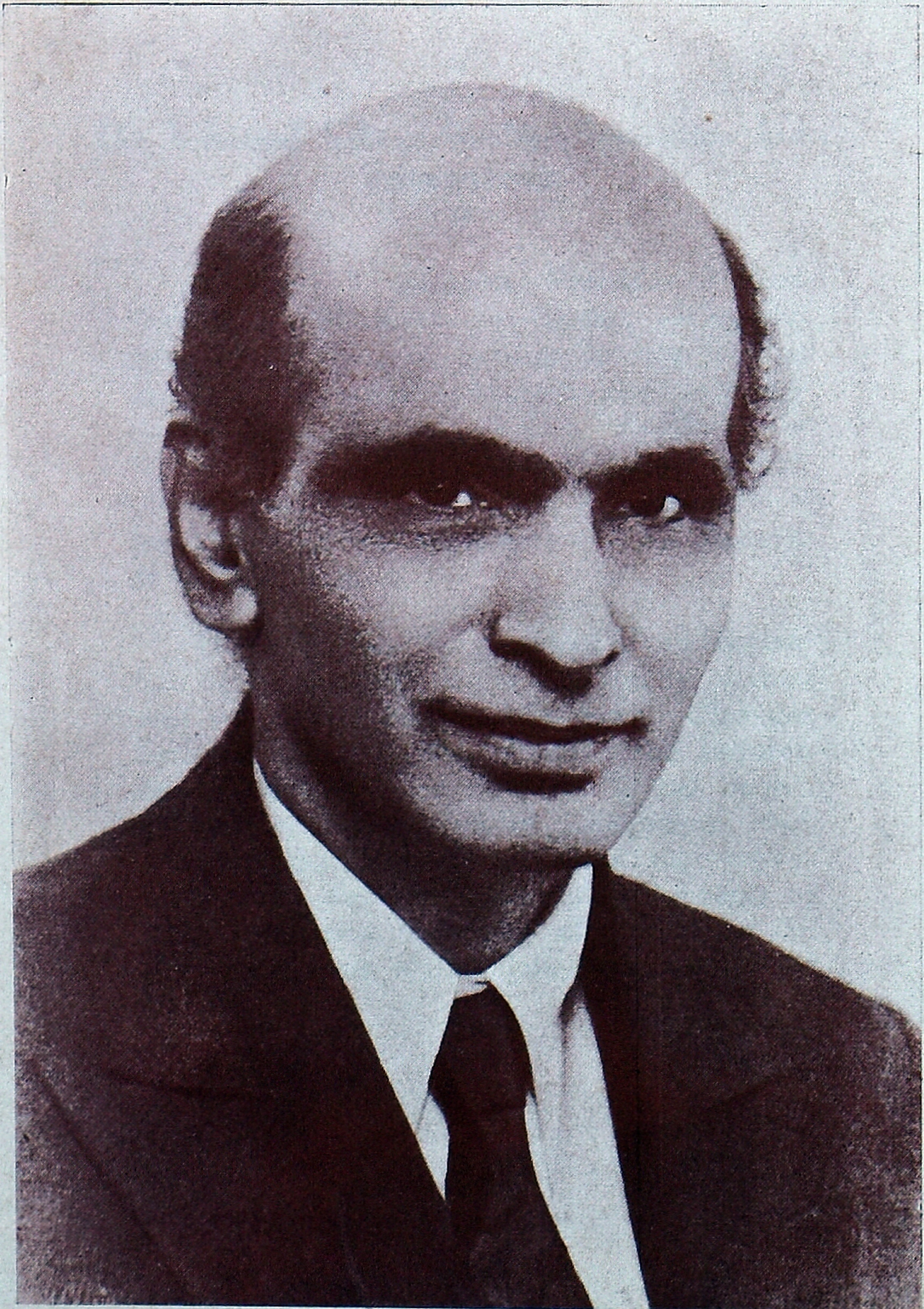
Dr. Harry F. Clements, Professor of Plant Physiology, University of Hawaii, Honolulu, delivered a series of lectures on crop logging and sugarcane nutrition at the Sugarcane Breeding Station, Coimbatore from 20—8—58 to 30—8—58. A number of sugarcane research officers and technologists from various parts of the country visited Coimbatore on that occasion to hear the lectures.

Mr. G. D. Naidu the president of this Association took advantage of the opportunity of their visit and gave a party to Mrs. and Dr. Clements and the members who attended the lectures, on 26—8—'58 evening at "Gopal Bagh", Coimbatore. The elite of Coimbatore town attended the function in large numbers. Mr. Naidu's welcome address and the reply by Dr. Clements and vote of thanks by Sri Girdharilal, one of the delegates, are printed herein.



G. D. NAIDU

Address of welcome by

Mr. G. D. NAIDU

Dear Mrs. Clements, Dr. Clements, the Members of the Sugarcane Research and Technology and Ladies and Gentlemen:

At the outset I have to thank Dr. Clements and the members of the Sugarcane Research and Technology to have accepted my invitation for this party. First I arranged this party on the basis of a business. When I returned day-before-yesterday from Madras, some of the members asked me whether I would be here on the 26th and the 27th. I said "Yes" Then I came to know that these members wanted to give me a party and they were making arrangements for the same. After knowing this, I made arrangements for this party fixing the date as 27th and prepared invitations accordingly before they arranged the party. Then the members argued with me for which I said "While you are my guests, it is not right to give a party to me in my place, but I have no objection to accept a party in your place when I come there". In that case I can get more than 20 parties in 20 places in return for my giving one party here.

By this way I get 19 parties extra, which is very good profit to me. Therefore, I stubbornly refused to accept their party. Then I pressed and insisted and they have accepted the party. Finally through the members I got the acceptance from Dr. Clements for today.

My occupation is mainly industry. But I am interested in agriculture, medicine, and in some other activities, because I had worked in the fields and gardens in my young age, but not continued for a long time. I am also interested in education, learning in the shortest time with the lowest expenses to get the best and ample knowledge, because I had never been to any schools in this country.

Now I want to say here how I got in touch with this agriculture and medicine after losing the ground for several decades. From 1920 upto 1944, I was busily engaged in automobile industry for 25 years. In the middle I was stuck up in U. S. A. at the time of the World War II for more than 1½ years, during which time I spent about a year in U. S. A. alone, where I saw many wonderful results obtained from researches in agriculture, particularly in California.

On my return I got back my pistol, which was kept in police custody for more

than one year, which got rusty. After cleaning it, I tested with 7 bullets shooting in 7 plantain trees just above the roots and in that holes I filled up some chemicals. Actually they were not chemicals, but ordinary materials such as salt, bread, meat, tea, urine, battery-water etc. For many years, these were not kept in secret. But for the last few years, I kept these things as a great secret in order to increase the value, keenness, desire, enthusiasm and cost, as I know that if anything is given free, even if it is diamond or gold, it has no value. After filling up with these rare chemicals as mentioned above, some plants had rapid growth. Two plants started to fade and finally dried. Then I took more interest and finally I made several experiments in this line.

At the time of the British Government, some leading agriculturists were selected and appointed as visiting members of the Agricultural College at Coimbatore. Perhaps by a mistake or accidentally I was nominated for a term as a visiting member for the college. When I visited this college for the first time on the 31st July 1946, I wrote some remarks. I mentioned in the last portion of the remarks that unless this is done, the agricultural college will look only like a museum for a few interested

people. From that time, the friendliest fight started. When I attended the next periodical meeting, the chairman asked me how my research was started. I refused to discuss anything as my remarks were not brought to that meeting. Then I told him that I wanted to see whether this institute could bring out any success in the plants as I had brought in some. Upto that time I had made experiments in plantains, oranges and papaya. In plantains there are more than 50 varieties in India, in which about 15 are very tasty. My research was by crossing different types of plantains with each other by injections with the help of vacuum pumps, compressor machines to exchange their nutrition after extracting from the ground, to each other, in addition to some chemicals. By this I was able to get 9 types of plantain fruit taste in one tree. The same method, I tried in orange tree. I was able to change the taste of the orange fruit to extreme bitterness for 3 years and extreme sweetness for another 3 years. Then I tried on papaya bringing different types of papaya trees into one, in which sweet taste increased, eliminating the papaya smell completely, with different shapes with very large yield. In cauliflower also I tried. In all these four, cauliflower and orange did not produce the results as expected. Plantain and papaya are also

giving the same results without further injections. Orange and cauliflower seeds do not give the same result in the next generation. As the first injection work was an elaborate one, I did not try the experiment again in these trees. In papaya trees, it gives very good yield for 2 to 3 years. Then the yield is much reduced, but the seeds give the same results without further injections. Plantain also gives same result in the next generations. I tried with maize, red-gram and cotton with very good success.

When Sir C. V. Raman, Sir John Russel, Prof. Ashby, Director of Agricultural Economics and some other friends from Sweden, U. S. A., Burma, China and Germany also visited my farm, many of them gave some more advice to follow in work. I give here some of their letters, printed in another pamphlet as it will take much time to repeat the whole matter here:

Sir C. V. Raman, Malleswaram P. O., Bangalore (Tel. 2023) writes on 29th June, 1948:

Unique.

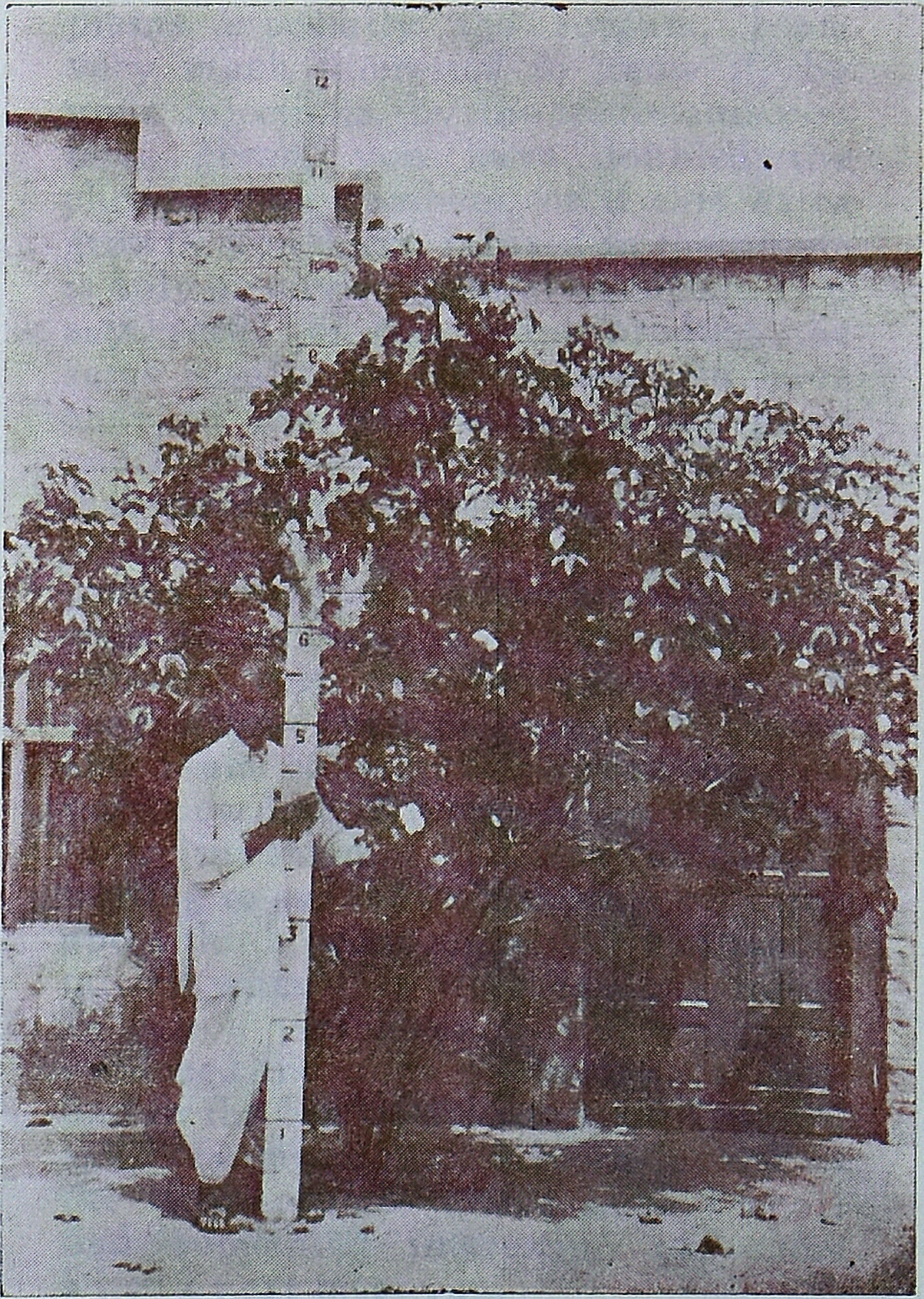
"Like Luther Burbank, Mr. G. D. Naidu has sought to improve upon Nature's creation in the plant world. His methods are original, if unortho-

dox. I have been photographed standing besides cotton and maize plants of dimensions not quite Brobdingnagion – but nevertheless of the believe it or not variety – stimulated by the strong medicines contrived by Mr. Naidu's fertile ingenuity or imagination – call it what you like. I hope the world at large will benefit by his experiments.

* * *

Opinion of Dr. (Miss) E. K. Janaki, M.A., D.Sc., Cytologist, Royal Horticultural Society Gardens, Wisley, Repley, Surrey, England, on 14—1—1949 at "Gopal Bagh", Coimbatore.

"The maize plant has 20 chromozomes, but a distant cousin of it which is known as *Jogstears* has only 10 chromozomes and that is more or less found in any grass; by examining chromozomes you can have better picture of the relative relationships between plants than by just examining leaves or flowers or any other structures. So my work is to link up the study of chromozomes with the study of systematics and geographical distribution, so that we can have a more true picture of what has been happening in our



G. D. Naidu, Cotton plant of more than 10½ ft. high.

plants, specially in relation to the origin of cultivated plants. In your plants especially the sorgum, I am very much interested to know if, by your injections, by the treatments you have given, you have doubled the chromozome numbers, or if this extra growth you have infused in the plants is only an environmental change. You say seeds of this plant produce the same results, in which case you have changed the microzomes of the plant and I am very much interested to see if that hereditary change has been brought about by the increase in the chromozomes principle. If it is brought about with an increase in the chromozomes number, then you have discovered a very unique way of improving plants and I am congratulating you on this very new line of research, on that you have invented. We are anxiously waiting to see the experiments repeated and I think, your name will be immortalized when this work is done more. In cotton you have grown, you have produced the same phenomena as you find in the Sea Island cottons. I cannot say very much until I have looked at the chromozomes and I hope I shall find something interesting to report when I next meet you.

Sir C. V. Raman, Kt., F.R.S., N.L., Raman Research Institute, Hebbal, Bangalore, on 9th April, 1950, remarks:

"It would need an abler pen than mine to sketch in a few words a picture of the remarkable man that Mr. G. D. Naidu is and to indicate his great character and most varied achievements. Only this morning I visited a farm near Podanur where he has created a whole series of botanic marvels which should give food for thought to any enterprising biologist. A great educator, an enterpreneur in many fields of engineering and industry, a warm-hearted man filled with love for his fellows and a desire to help them in their troubles, Mr. Naidu is truly a man in a million – perhaps this is an understatement!

* * *

Mr. H. B. Mohanty, Planning & Reconstruction Department, Cuttack:

"Ever since I visited your ideal institution, I have been insisting on my government to send a few students there for training in Automobile and Radio Engineering. Government have

now sanctioned scholarships and they have asked me to request you kindly to spare as many seats as you conveniently can this year. Our requirements are three seats in each of the subjects, but we will be satisfied with whatever you can spare. I am therefore making this personal request, because, I have told my Government that the boys receive a type of training in your institution, which they will get nowhere in India. I have seen most of the institutions in India and my firm conviction is that the training and moulding of character for which your institution provides facilities is unique in India. That is why we are so very anxious to get a few students trained there and I hope we will not be disappointed.

* * *

A. J. Lund, Chief Engineer, Cooper Engineering Co., Satara:

"To-day I came from Bangalore to Mr. G. D. Naidu's Bungalow at "Gopal Bagh". I have seen here methods for educating students in engineering, that is, mechanical engineering, electrical engineering, radio and other types of industry.

I feel that the methods employed here are something very unique indeed and not employed in any other country I have visited so far. For India to industrialize, such form of education, to my mind, is absolutely essential. One particular aspect is the time with which this education and instruction are imparted in the ordinary way as against the methods employed by Mr. Naidu. He often remarked that courses as given in other countries, may be 5 years or 3 years or 2 years, but could be imparted at Mr. Naidu's place in a matter of one year, 6 months, 3 months or down to a matter of weeks. But at first without seeing the actual methods employed it sounds somewhat fantastic, but after seeing the methods, the various diagrams and instructional methods used, it is quite easy for one to understand how much knowledge can be acquired in the short space of time. India to-day is free to industrialize and I think every one realizes the wonderful opportunities for the country in every form of industry. Many nations with educated people achieved industrialization over a very very long period. That was no doubt due to the methods employed in those days whereby it took long for this knowledge to be acquired.

I feel that there is a very great future for India in industrialization, provided that this comes about by employing proper methods. First of all, we must educate the population so that they are able to serve efficiently and with knowledge in industry. In the ordinary way, it takes a long time and I do feel that every type of educational institute throughout India should adopt similar methods to those employed by Mr. Naidu.

Once more I must say how unique the methods are that are employed by Mr. Naidu at "Gopal Bagh".

* * *

F. Draper, Vice President, Warner Electric Company, Chicago, III:

"I want to take this occasion, Mr. Naidu, to let you know how much I appreciate your visit. I want to say that I shall count the hours I spent with you as some of the best I have spent in my life. I feel I had an opportunity to learn a great deal from you and I wish I had an opportunity to learn a great deal from you and I wish I had the strength and the power to follow your "way of life" to some extent at least.

D. McArthur Robertson, Field Technical Representative, South Zone, General Motors, India Limited, Bombay:

Visiting your exhibition with you, I was pleasantly surprised and I have to admit my surprise to see so fine a collection of modern machinery, both electrical and mechanical.

Your demonstration lay-outs, I give full marks. They should make clear to the most non-technical mind that there are no mysteries in the automotive world and that common sense and the will to learn are all that are needed to master its principles.

I met a number of young people there and as a Britisher, was pleased to see a man has reached your prominence in the Engineering world taking this interest in young Indians who might hope to follow in your footsteps.

* * *

Frank S. Brainard, Jr., President, Brainard International Company, New Port, Rhode Island, U. S. A.:

It is too great a presumption for a young man from America to try to gain an understanding of the many thoughts

offered by a Great Man of India. This day proves to me that there is an unending river of knowledge for us in the Eastern world to gain from study from contemporary India as well as historic India.

After this very interesting visit, I must say that my greatest desire is to pray that your great knowledge and ability will not be wasted but instead used in the very necessary work of building the industrial strength of India which will in turn create wealth which is the only way in our materialistic world to raise the standard of living of your people.

This day has had real significance in my life and is truly an inspiration to me.

* * *

In the beginning for several years I gave the seeds to many friends who had been here. For courtesy sake no one refused to take it, but the seeds were never used by anyone amongst hundreds who got the seeds.

Once I gave an advertisement in papers. Then in 3 days, more than 70 people from a distance of 100 and 200 miles came to see

the plants. They were sent back saying that the seeds were not dried and not fit to be sown. Some of them came back again after a week, took the seeds, paying such heavy price as Rs. 10/- per seed. They treated the seeds as God's present. They were writing the progress of the plants for a long time. Generally this is the public mentality. Eventhough any matter may be very useful, it is very difficult to be adopted by them. On the other hand, the results of the research and inventions, though they are very useful and valuable, they are not given or introduced in a suitable way, whether by teaching or public lectures. If it is necessary, it is to be brought only by an act or by any other pressure.

When I was a visiting member, I suggested to the Agricultural Department when there was severe famine for water and consequently food grains, to manufacture number of bore-well machines to be distributed to all places. This will be cheaper in the long run than the waste of sinking wells and other connected works as done later and experienced by the government. On account of the suggestions travelling through a very long route in the carriage of red-tapism through numerous departments, the whole scheme recommended by the Agricultural Department

was hidden away somewhere or disappeared. Even now many valuable schemes and works thought by experts and drafted and started with preliminary works are lying idle somewhere in the shelves of the Government offices or somewhere in the pockets of the private people, or still remaining in the heads of brainy people.

Comparing the present time with 10 years back, people like our Mr. Nayak, Dean of the Agricultural College and other enthusiastic team of the Agricultural College and the higher officers in the State level are taking much efforts to put all the improvements and inventions by their continuous efforts in practice among the public. I saw recently in Pusa where wheat, barley and other grains are produced with high yield by the help of the Isotopes, produced by the atomic engineering by the efforts of some persons in the Research Station. The Agricultural organization, I mean the Indian Council of Agricultural Research in Delhi also have very much improved the activities. The environments have entirely changed to serve for useful purpose, not to keep as a museum as it was in the olden days. The officers like Dr. Randawa, Dr. S. Krishnamurthi and others who are striving their best to put all the plans, which were hitherto in dreams,

into practical action, taking the work with so much troubles as their own work, connected with their own body and mind.

If the whole agricultural department follow these ideals as told by the officials like Mr. Nayak, Dr. Randawa, Dr. Krishnamurthi and other interested officers with the cooperation of their students and officials, there won't be any difficulty to solve the food problem of our country. We have lands to provide food for the increasing population of our country for another 50 or 100 years. We have brains and we have also the help from the United States, Canada, England, Australia and even from war-worn-out Japan, Germany, France, Italy and other countries.

Recently Mr. Elmhirst of Britain said in the 10th International Conference of Agricultural Economics that "Different factors influence the parity position of Agriculture. Some of these factors are local, some are world-wise, some act within agriculture itself and some act from outside, some arise from political or Governmental decisions and developments, some from technical innovation or change, some come as a result of socialogical or biological disturbance such as the growth or shift of population and others from the ever-

changing preferences of human beings". He has thus pointed out that there are so many types of obstructions.

Along with the Agricultural Research, I had the opportunity to have connection with Dr. B. P. B. Naidu, M.D., (Edin.), M. Hy., D. P. H., D. T. M. (L'pool), who is the topmost among the living doctors of Pathology. He had spent 25 years in England in the medical line as Research Doctor, Lecturer and other connected works and he then worked in the Hapkins Institute for another 25 years. He is the inventor of several medicines, which are in daily use throughout India. In addition to this work, he has made researches in Indian Plants for the last 20 years. I don't think anybody else in our country has made so much elaborate research in Indian plants and made such large use in the medicinal world. In a peculiar circumstance he was and he is available here and by his continuous efforts he has brought out two medicines very successfully for diabetes and leucorrhoea. Now he is making research for a remedy for Asthma. By his association, I too got interested in the indigenous medicines. Then one Siddha Doctor U. K. Nair came across, who helped to make and use siddha medicines which cure several of the diseases. Though these medicines are not

directly connected, major portion of the ingredients come from the herbs and plants. Hence I took interest in this also.

I saw the minister Mr. M. V. Krishnappa, who is connected with the agricultural ministry and mentioned several schemes to conquer the troubles. I hope such organisers can do much more help in the food problem which is the foremost cause of the troubles created in any country in the world. In our country excepting a very few communist members, 99% of the people while not knowing the meaning of democracy to a full extent, do not like the way of communism. But the small trouble created by food problem in some patches of lands, the communists are making too much of propaganda. Because of these political parties, the morale of the labour is going down. The Government's policy is not sound in crowding of everything in big cities, such as starting new industries, new colleges and new schools and constructing new buildings required for the demand of the public and private sectors, buildings and other amenities for workers in or around the cities, which are already congested and which portions cannot be improved even by any modern methods unless with the sacrifice of huge sums. Even such places improved with such huge

sums, won't solve the problem. The villages outside the towns have no facilities even for ordinary living and for many days in the year no employment for the workers and naturally they are attracted to these modern hells and emigrate to towns to grow a dangerous problem which cannot be solved easily. Though our leaders visited the foreign countries and had seen the recent trends of starting industrial plans, colonies, hospitals etc., which are out of the town in the centre of villages attracting the people from the towns to live in villages which are the modern heavens, they have not taken the least strain to follow such a method in our country. They are helping the growth of the cities and suburbans to have more and more congestion, to decrease the health and strength of the people, to increase the number of hospitals and dispensaries and to create famine for the agricultural workers in the fields. Now whatever efforts you all agricultural-scientists may take in hand, will not give any return at all for our country, unless the Government scrape out the present labour acts, factory act and other connected enactments and scrape out the political parties and scrape out the improvements of the city planning, our country cannot go forward as expected, eventhough funds pour out from the United States, England

and other countries. Perhaps if these funds are spent for removing all the government offices and institutions, private industry and business concerns outside the towns, not within a few miles of the towns, but to the different centres of the villages, such work will be a boon for India. For some reason or other known to some people alone, the Central Government is spending enormous amounts on buildings and new institutions in Delhi alone and the State Governments are also spending their time and energy in buildings, colleges, institutions and other crowding activities in cities alone. Still they did not feel that these activities are more dangerous than the outside enemies of Goa, or Pakistan or any other countries. These activities in addition to the thrusting of Hindi language in the name of the Constitution and in some other names throughout India are the main causes for demanding separation of States. I am sorry for dragging slowly to the politics in this meeting.

Now I am very fortunate to have the best sugar-cane experts as my guests for these few days. I feel the time which I spent with them in the mornings and evenings gave not only best rest, but also it gave me more vigour and enthusiasm in my work. I think I am not able to give anything equal in return to them.

Unfortunately I have no time to discuss more and more about the subjects interesting to me as well as for them as I am leaving tomorrow to Germany. I have already invited Dr. Randawa and Dr. Krishnamurthi to stay with me, but on account of the dates of the boat sailing, I have to leave day-after-tomorrow. In my absence, instead of my welcoming them, all the friends from various states, who are staying here will receive them and look after their comforts in this house. I do not know what materials to give to you in return for the pleasure and knowledge given to me while being with you during your stay here. Though I have not got any gems or gold or such other materials with me, I can boast that I often enjoy the company of gems like you in agriculture, engineering and other lines, with experts spending some of my time, which I take as more valuable than any other assets. Again I thank you all, friends, who have attended this meeting in such short notice, though it would be inconvenient.

Thank you all.

Reply by

Dr. HARRY F. CLEMENTS,

University of Hawaii, Honolulu.

Delegates, Ladies and Gentlemen,

Thank you very much. I don't know why I should be called upon to speak after listening to an interesting speech like this. I was listening to Mr. Naidu before he got up to give his official talk. I guess that there is a certain amount of the un-reconstructed rebel in him, from the comments that he makes.

Now another thing is this. He is obviously so much brighter than I am, that he should have continued to speak. He went to school he says for one year in America, part of that being in factories in St. Louis, part in Calamesu, part in other parts of the country.

I went to school, Mr. Naidu, 8 years in a Primary school, I went 4 years in a High school, and then I went 3 - 4 years in a University and then they thought I wasn't bright enough still and they sent me another three years to a University. Now I think it is rather ridiculous to listen to me, when you

have a man to do all these in just one year. Now another thing about Mr. Naidu. I notice one of the signs he has up here says "No Politics" and then he goes ahead and talks Politics. It seems to me that it is something like the sign we see in hotels "No tipping allowed" and yet if we don't tip, the boys begin to look very sad when we leave. After listening to Mr. Naidu tell about his shop here and how he takes the youngsters and he teaches them, I think it is a wonderful thing. After listening to him tell about his ideas in teacher training and then his ideas here in plant production it seems to me that he is a "Burbank" who was our plant expert in California, Burbank – We kept turning to these to Burbank. We have a Mr. Burbank. He is no longer living in California. He used to make cactus produce oranges and things of that sort. That was very wonderful. Then we had a Henry Ford, who built cars and we had a Thomas Edison, of course who made Electric lights. It seems to me that your Mr. Naidu is all three of those, rolled into one person and I think it is very wonderful that you have such a person and I think, Mr. Naidu, that it is wonderful of you to have us here for this tea. I am not good at after lunch speeches. All I want to do is to thank all of you for your generosity in treating both Mrs. Clements

and me so generously while we have been here. We are looking forward to the rest of our trip. Frankly I am fairly optimistic and excited about the prospect for India after seeing the dams, that are being built after seeing the interest that you fellows have had in the discussions that we have had. It seems to me that your agricultural productions will have to come up and certainly the major problem of feeding your people should be solved, as the years go on. Thank you very much!

I would like to say one more point you could improve on this presentation business. (pointing to the flower garland). Now in Hawaii the way we do is this. We pick the most beautiful girls in our city, to present the leis to dignitaries and when they do that they kiss them and I think that is a much nicer custom.

Thank you very much.

Vote of thanks by

Sri GIRDHARILAL,

Research Officer, Daurala Sugar Works,
Daurala, Meerut, U. P. on 26—8—'58.

Mr. Naidu, Dr. and Mrs. Clements, Ladies and Gentlemen:

You have listened to the speech of Mr. Naidu and must have had an insight into his researches in the realm of agriculture. I will not be able to deal with it and I think I will only be confining myself, to just thanks giving. On behalf of the delegates, to the series of lectures by Dr. H. F. Clements on nutrition of sugarcane, we think it is our duty to express our deep sense of gratitude and respect to Mr. G. D. Naidu, the veteran industrialist of South India. A very large number of us enjoyed his spontaneous and well-known hospitality at the famous Gopal Bagh, all these days. In spite of his numerous engagements and very busy life, he was with us at lunch or dinner, a number of times. It did not take us long to know that we were with a very big genius. We also consider ourselves fortunate in being able to see a bit of this master mind and a bit of his vast organising

capacity. All these should prove very useful and inspiring to us in our various persuits.

On behalf of the delegates, I also take this opportunity to express our deep-felt thanks to Dr. Clements for the series of most enlightening and exhaustive lectures on sugarcane nutrition. I am sure these pave the way to an exhaustive series of investigation on the subject enabling us to utilize the croplog conception so ably expounded by him, enabling us to produce more sugar per acre at less cost. Before concluding, once again I thank Mr. Naidu and Dr. Clements for the very nice treatment we have had.

Thank you very much.

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